

$$\frac{1}{4} \text{ of } 2000 = 500$$

parts

$$2\frac{1}{2} \text{ of } 3800 = 1900$$

$$3\frac{1}{2} \text{ of } 3600$$

1.  $386 \times 0.01 = 3.86$

2.  $17 \times 14 = 238$

3.  $23 \times 25 = 575$

4.  $425 \div 100 = 4.25$

5.  $2476 \times 0.001 = 2.476$

$$\frac{4}{6}$$

$$3600$$

2 away from 6

$$600$$

$$3600 - 600$$

$$\begin{array}{r} - 600 \\ \hline = 2400 \end{array}$$

# December 5 /06

mental math

$$\frac{2}{3} \times 3000 = 2000$$

$$\frac{4}{8} \times 1000 = 500$$

$$\frac{2}{5} \times 30 = 12$$

December 6/06

$$1. \sqrt[3]{\frac{3}{5}} \times 35 = \boxed{21}$$

$$2. \sqrt[8]{\frac{2}{7}} \times 56 = \boxed{16}$$

$$3. \sqrt[9]{\frac{4}{9}} \times 81 = \boxed{36}$$

# mental math

$$6 \times \frac{5}{8} \times 48 = 30$$

$$\frac{2}{3} \times 75 = 50$$

$$\frac{3}{8} \times 1000 = 375$$

December 14/06

$$1) \frac{17}{24} \times 48 = 34$$

$$2) \frac{6}{16} \times 1600 = 600$$

$$3) \frac{8}{9} \times 8100 = 7200$$

# January 11/07

## Double and Halve Strategy

1.  $4 \times 5 =$   
 $2 \times 10 = 20$

2.  $15 \times 4 =$   
 $30 \times 2 = 60$

3.  $4 \times 35 =$   
 $2 \times 70 = 140$



January 11/07

Double and Halve  
copy and complete

$$\begin{array}{l} 1. \quad 12 \times 35 = 420 \\ - \quad 6 \times 70 \\ - \quad 3 \times 140 \end{array}$$

$$\begin{array}{l} 2. \quad 16 \times 25 = 400 \\ \quad \quad 8 \times 50 \end{array}$$

$$\begin{array}{l} 3. \quad 8 \times 18 = 144 \\ \quad \quad 4 \times 36 \\ \quad \quad 2 \times 72 \end{array}$$

$$29 \times 25$$

$$35 \times 25 = 875$$

January 15

1.  $350 \times 18$

6300

2.  $250 \times 16$

4000

3.  $85 \times 16$

1360

104  
~~52~~  
~~26~~

January 17/07

1.  $13 \times 16 = 208$

2.  $22 \times 2 = 44$       $22 \div 4 = 5 \text{ R} 20$   
550

3.  $19 \times 16 = 304$

38     8  
76     4  
152 x 2

January 22/07

1.  $16 \times 13 = 208$

2.  $16 \times 9 = 144$

3.  $225 \times 8 = 1800$

$$1) \quad 18 \times 16 = 288$$

$$2) \quad 8 \times 22 = 176$$

$$3) \quad 25 \times 16 = 400$$

January 26/07

1.  $13 \times 8 = 104$

2.  $24 \times 4$   $96$

3.  $18 \times 32 = 288$   
 $576 \checkmark$

# Moving the Decimal

$$8 \times 100 = 800$$

$$8 \times 10 = 80$$

$$8 \times 1 = 8$$

$$8 \times 0.1 = 0.8$$

$$8 \times 0.01 = 0.08$$

$$956 \times 0.01$$

$$956.$$



1.  $942 \times 0.1 \rightarrow 94.2$

2.  $9676 \times 0.001 = 9.676$

3.  $428 \times 0.01 = 4.28$

Moving the Decimal Dividing by  
10, 100, 1000 ...

$$845 \div 100 = 8.45$$

$$9284 \div 10 = 928.4$$

---

$$8000 \div 240$$

$$800 \div 80 = 10$$

$$80 \div 8 = 10$$

$$9284 \div 1000 = 9.284$$

$$642 \div 1000 = 0.642$$

$$28 \div 10 = 2.8$$



$$27 \times 25$$

$$\begin{array}{r} 6 \\ 4 \overline{) 27} \\ \underline{-24} \\ 3 \end{array}$$

$$675$$

$$120 \times 25$$

$$30 = 3000$$

$$34 \times 25$$

$$8 \times 100$$

$$2 \times 25$$

$$850$$

$$1) \quad 26 \times 25 \quad 650$$

$$2) \quad 25 \times 25 \quad 625$$

$$3) \quad 37 \times 25 \quad 925$$

$$4 \times 25 = 100$$

$$31 \times (25)$$

$$\begin{array}{r} 700 \\ 75 \\ \hline 775 \end{array}$$

# Trick for the Teens

$$\begin{array}{r} 17 \\ \times 15 \\ \hline \end{array}$$

$$17 + 5 = 22$$

$$22 \times 10 = 220$$

$$7 \times 5 = 35 +$$
  
$$= 255$$

$$- 5 \times 7$$

$5 \times 10$	50
$10 \times 7$	70
$10 \times 10$	100

$$22 \times 10 = 220$$



$$19 \times 15 = 285$$

$$\underline{17} \times \underline{13} = 221$$

$$14 \times 13 = 182$$

1.  $895 \times 0.01 = 8.95$

2.  $926 \div 100 = 9.26$

3.  $17 \times 14 = 238$

4.  $29 \times 25 = 725$

5.  $65 \times 0.001 = 0.065$

February 6/07

$$\begin{array}{l} 3 \times 16 \\ 6 \times 8 \end{array}$$

1.  $13 \times 16 = 208$

2.  $18 \times 25 = 450$

3.  $146 \times 0.01$     1.46

4.  $289 \div 100$     2.89

5.  $1322 \times 0.001$     1.322

1.  $17 \times 16 = 272$

2.  $34 \times 25 = 850$

3.  $2426 \times 0.001 = 2.426$

4.  $7642 \div 1000 = 7.642$

5.  $12 \times 0.001 = 0.012$

$$1. 752 \times 1000 = 752\,000$$

$$2. 2675 \times 0.001 = 2.675$$

$$3. 12 \times \left( \frac{10\%}{0.1} \right) = 1.2$$

$$4. \left( \frac{0.01 \times}{1\%} \right) \text{ of } 36 = 0.36$$

$$5. 19 \times 13 = 247$$

$$19 \times 13$$

$$22 \times 10 = 220$$

$$9 \times 3 = 27$$

$$0.1 \times 100 = 10\%$$

$$0.01 \times 100 = 1\%$$

# Subtracting in Parts

$$12.6 - 11.3 = 1.3$$

$$4.57 - 2.31 = 2.26$$



$$1. 4.95 - 1.23 = 3.72$$

$$2. 6.04 - 4.02 = 2.02$$

$$3. 9.57 - 3.54 = 6.03$$

$$4. 6.24 - 2.13 = 4.11$$

$$5. 7.54 - 5.04 = 2.50$$



$$1. \quad 2.43 - 1.12 = 1.31$$

$$2. \quad 9.65 - 8.32 = 1.33$$

$$3. \quad 6.76 - 4.54 = 2.22$$

$$4. \quad 8.98 - 3.76 = 5.22$$

$$5. \quad 4.67 - 3.14 = 1.53$$

(

$$1. 4.95 - 1.23$$

$$3.72$$

$$2. 6.04 - 4.02$$

$$2.02$$

$$3. 9.57 - 3.54$$

$$6.03$$

$$4. 87 \times 3 = 261$$

$$5. 17 \times 14 = 238$$

$$25 \times 14 = 350$$

$$1\% \times 200 = \textcircled{2}$$

$$1\% = 0.01 \quad 36\% \quad \textcircled{72}$$

$$10\% = 0.1$$

$$8 \times 9 \times 7 \times 16 \times 5$$
$$\begin{array}{c} \diagdown \quad \diagup \\ 2 \times 8 \end{array}$$

$$8 \times 9 \times 7 \times 10 \times 8$$

$$64 \times 9 \times 7 \times 10$$

$$64 \times 90 \times 7$$

$$64 \times 630$$

$$64 \times 630$$

$$32 \times 1260$$

$$16 \times 2520$$

$$8 \times 5040$$

$$4 \times 10080$$

$$2 \times 20160$$

$$40320$$

$$(25) \times 5 \times 9 \times 2 \times (4)$$

$$\underline{100} \times (5) \times \underline{9} \times \underline{2}$$

$$500 \times 9 \times 2$$

$$1000 \times 9$$

$$9000$$

1.  $5 \times 7 \times 2$  70

2.  $2 \times 13 \times 5$  130

3.  $2 \times 6 \times 15$  180

4.  $4 \times 2 \times 9 \times 8 = 576$

5.  $9 \times 8 \times 9 = 648$



1.  $15 \times 3 \times 4 \times 2$  360

2.  $4 \times \underline{4} \times \underline{15} \times \underline{5}$  1200

3.  $5 \times 5 \times 6 \times 2 \times 2$  600

4.  $(+5) - (+6) + (+2) - (+1) = 0$

5.  $3\% \times \underline{90}$  2.7

$$47\% \times 10382$$

$$50\% = \overset{4}{5} 19 \overset{9}{0} 0$$

$$- 311.46$$

$$1\% = \boxed{103}82 \boxed{4880.54}$$

$$309$$

$$311.46$$

$$\begin{array}{r} 5 \overline{) 15} \div 5 \end{array}$$

$$5 \times 3 = 15$$

$$5 \times 100 = 500$$

$$6 \overline{) 36} \div 3 = 212$$

600  
36

600  
30  
6

$$6 \overline{)48} \div 6 = 108$$

$$1025 \div 5$$

$$1000 \div 5 = 200$$

$$25 \div 5 = 5$$

$$7721 \div 7$$

7000

700

21

7700

21

1.  $436 \div 4 = 109$

2.  $12 \overline{)48} \div 4 = 312$

3.  $1208 \div 2 = 604$

4.  $30\% \times 3000 = 900$

5.  $2.5 + \underline{7.5} = 10$

$$10\% \times 200 = 20$$

0.1



1.  $69 \div 3 = 23$

2.  $146 \div 2 = 73$

3.  $714 \div 7 = 102$

4.  $10\% \times 1000 = 100$

5.  $648 \div 8 = 81$

$$4\% \times 120 = 4.8$$

$$1\% = 0.01 \times 120$$

$$\begin{array}{r} 1.2 \\ 1.2 \\ 1.2 \\ + 1.2 \\ \hline \end{array}$$

$$47\% \times 1236$$

$$1. \quad 24 \overline{) 18} \div 6 = 403$$

$$2. \quad 32 \overline{) 8} \div 8 = 41$$

$$3. \quad \underline{42 \overline{) 77}} \div 7 = 611$$

$$4. \quad 5\% \times \begin{array}{c} 5000 \text{ } 000 \\ 250 \text{ } 000 \end{array}$$

$$5. \quad 5\% \times 1000 = 50$$

$$2\% \times 92 = 1.84$$

# Dividing by balancing

$$\begin{array}{r} 3 \div 0.5 \\ \times 2 \quad \times 2 \end{array}$$

$$6 \div 1$$

$$\begin{array}{r} 10 \div 1\frac{1}{4} \\ \times 4 \quad \times 4 \end{array}$$

$$40 \div 5 = 8$$

$$\begin{array}{r} 35 \div 0.25 \\ \times 4 \quad \times 4 \end{array}$$

$$140 \div 1$$

$$\begin{array}{c} 40 \\ \div 2 \\ \hline \end{array} \div \begin{array}{c} 4 \\ \div 2 \\ \hline \end{array} = 10$$

$$20 \div 2 = 10$$

$$\begin{array}{c} 45 \\ \times 5 \end{array} \div \begin{array}{c} 0.2 \\ \times 5 \end{array}$$

$$225 \div 1$$

$$1. \quad 3^{\times 2} \div 0.5^{\times 2} = 6$$

$$2. \quad 3^{\times 5} \div 0.2^{\times 5} = 15$$

$$3. \quad 18^{\times 4} \div 25^{\times 4} \quad \boxed{72 \div 100 = 0.72}$$

$$4. \quad 2\% \times 45 = 0.9 \phi \phi \phi \phi$$

$$5. \quad \frac{2}{3} \times 900 = 600$$

1.  $5 \div 0.10¢ = 50$

2.  $0.2 \sqrt{60} = 30$

3.  $0.1 \sqrt{9} = 90$

4.  $\frac{4}{6} \times 48 = 32$

5.  $3\% \times 34 = 1.02$

$$1. \overset{\times 5}{30} 6 / 10.2 \overset{\times 5}{=} 30$$

$$2. 4 / 0.1 = 40$$

$$3. \overset{92}{\downarrow} 23 \overset{\times 4}{=} / 25 \overset{\times 4}{=} \overset{100}{=} 0.92$$

$$4. 4\% \times 46 \overset{\text{u}}{=} 1.84$$

$$5. 7/9 \times 81 = 63$$